



ADELIX
TURKEY

ADL-UT20

Ultrasonic thickness gauge

Ultrasonic thickness gauge **ADL-UT20** can work with any separately combined transducers operating, as well as high-temperature transducers operating at frequencies from 2.5 MHz to 10 MHz, their use provides high reliability of results in laboratory, workshop and field conditions.

This device is implemented on a modern electronic base, equipped with a bright color screen and built-in memory for storing settings, characteristics of results.

This model has a simple and intuitive interface.

Lightweight shockproof case of this thickness gauge provides dust and moisture protection in various operating conditions, resistance to drops from a height of up to 2 meters.

The **ADL-UT20** ultrasonic thickness gauge is often used to quick measurement the thickness of metal and non-metal products such as: sheets, tanks, pipes, pipelines, bridge, hull, transport and other structures, during their operation to determine the corrosion state or after their manufacture.

Widely applicable to energy, metallurgical, machine building, shipbuilding, transport and other industrial enterprises.



FEATURES OF ULTRASONIC THICKNESS GAUGE ADL-UT20:

- high sensitivity;
- convenience in work;
- intuitively simple interface;
- the possibility of manual and automatic sensitivity adjustment;
- measuring range from 0.8 to 300 mm;
- connection of high-temperature converters up to 350 °C;
- the ability to connect any number of converters;
- convenient calibration by thickness or by speed and saving calibrations in the memory of the device;
- possibility of recording measurement results and data transfer to a computer;
- bright color screen;
- large memory with over 5000 measurements;
- built-in Li-on battery provides up to 8-9 hours of operation.



The functionality of the thickness gauge provides the output of messages about the level of charge of the battery, as well as an additional notification of the maximum permissible discharge of the battery. When turned off, the device remembers the settings for the transducer (correction of the zero setting, gain, set ultrasonic speed in the material and levels). This device also has the function of setting up transducers by ensuring the established metrological characteristics for them and saving these settings in the memory of the device.

One of the advantages of the device is the work with specialized high-temperature sensors, which allow one-sided control of products with a surface temperature of up to 350°C.

The objects of control can be metal pipes or tanks without taking them out of service, various steam pipelines, metal bars and cast products before they are cooled.

SPECIFICATIONS

Parameter	Value
Measurement Principle	Ultrasound
Range of controlled thicknesses (of steel) with dual element transducers	0,8–300 mm
Complicated Shape Products	Minimum radius of curvature of the product is 10mm
Propagation speed of ultrasound	1000–9999 m/s
Measurement resolution	0,1; 0,01mm
Intrinsic measurement accuracy by ranges: T*=0,6...10 T*=10...300	$\pm(0,01T+0,03)$ mm $\pm(0,01T+0,1)$ mm
Microcontroller	ARM Cortex-M4
Display	TFT with matrix 240x320 pix
Memory	Up to 5000 measurements sorted by date time
Settings	Correction of the "0" setting, path amplification parameters, adjustment to a specific material, automatic shutdown time (1 –60 minutes), brightness, setting of rejection levels during analysis.
Communication with PC	micro-USB
Uptime	Up to 8-9 hours low battery alarm
Power supply	Li-Ion Battery
Dimensions	142x75x35mm
Weight	240g
Operating conditions	Temperature: -10 to +50°C
Level of dust and moisture protection	IP-54

BASIC DELIVERY SET:

Parameter	Value	Parameter	Value
Thickness gauge ultrasonic	1p	Passport	1p
Sensor	2p	Cable micro-USB	1p
Case	1p	Charger	1p
Manual	1p	Standard gauge for zero setting on dual-coupled probes	1p